

Research Paper

They think Cuties come from McDonald's: Policy narratives on water and agriculture in California's Central Valley

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Since the 1990s, there has been a steady increase among public policy analysts and researchers in examining the role of policy narratives in shaping the outcome of policy contests (see, for example, Roe, 1994; Stone, 2002; Jones et al, 2014). The narrative elements of public policy arguments influence how various stakeholders perceive a problem, how they allocate sympathy and blame, and how they evaluate the various policy options being proposed. Research has shown that actors deploy narratives to increase the likelihood that their preferred policy outcomes are accomplished (McBeth et al, 2005). Further, actors also use narratives to contain the policy agendas of rival coalitions. Policy narratives are thus used strategically by policy coalitions to advance their objectives and counter those of their opponents. However, is it possible that policy narratives also emerge after a policy contest has been (at least temporarily) settled? Can policy narratives also emerge as key policy actors attempt to make sense of a recent policy event? This could happen as they seek to make sense of why a particular group won or lost the policy contest. In other words, do policy narratives have a retrospective and sensemaking (Weick, 1995) element in addition to the well-observed strategic element?

This retrospective and sensemaking aspect of policy narratives is the focus of this study. This study explores the after-the-event narrative of an influential policy coalition to make sense of a significant policy loss. I show that several aspects of policy narratives posited by the Narrative Policy Framework (Jones et al, 2014) also appear in retrospective narratives just as they do in forward-looking, strategic narratives. This paper focuses on a drawn-out policy battle in California's Central Valley over water allocations to farmers that occurred during the early 2000s. Through sustained advocacy and litigation, the environmental coalition has successfully reduced (and in some cases eliminated) water allocations to farmers in California's Central Valley. Not only did this outcome threaten policy stability in the Valley, but it also posed a near existential threat to farming. The policy loss is especially surprising because it breached a long-upheld policy compact in California regarding water supplies to the Central Valley's farmers, and because it came about despite the economic and political power of the agriculture coalition.

The next section offers an overview of the Narrative Policy Framework (NPF). The NPF provides a comprehensive and empirically tested framework for analyzing policy narratives. This is followed by details of the policy context, including an overview of farming in the Central Valley, a summary of the policy debates over water, and a discussion of the methods for data collection. The retrospective policy narrative from the perspective of the agriculture coalition is presented, followed by a couple of implications for developing future policy narratives to support the policy goals of the agriculture coalition.

The Narrative Policy Framework

Starting with the premise that humans are storytelling animals (*homo narrans*), the NPF argues that stories are an important influence on people as they express policy preferences. Therefore,

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actors weave individual stories about what is happening in their policy world into broader narratives to make sense of the situation and influence others to support their policy goals. Although others have studied policy narratives (Roe, 1994; Stone, 1989; Fisher & Forester, 1993), the NPF is unique in offering a comprehensive framework for analyzing such narratives. The NPF posits (Jones & McBeth, 2010) that policy narratives have the following central elements – a setting (the policy issue occurring in a specific time and place), characters (victims, villains, and heroes), a plot (the actions and maneuverings of different actors), and a moral of the story (typically, the policy solution being offered by key actors). At a minimum, a policy narrative has one character and a clearly stated stance towards a policy issue (Shanahan et al, 2013).

In addition to studying narrative elements, past NPF studies have also examined narrative strategies of rival policy actors. For instance, policy coalitions use narratives for issue expansion or containment. Coalitions have an incentive to present narratives that expand the group of actors supporting their own policy goals. At other times, coalitions would seek an issue containment strategy in order not to share policy benefits with others. Another strategy involves the use of narratives for angel shift or devil shift. An angel shift occurs when a narrative assigns more credit than is warranted to make certain actors appear powerful. Devil shift occurs when a narrative assigns disproportionate blame for a situation to a character often associated with a rival coalition. Others used a narrative lens to study issues in the environment, agriculture, and natural resource policy domains. One of the earliest studies is Roe's work examining the California medfly crisis of the early 1980s, and the controversies around toxic irrigation in California's San Joaquin Valley (Roe, 1994). Others have studied policy issues such as the debates around climate change (McComas & Shanahan, 1999), agricultural biotechnology policy (Huda, 2019), wind turbines off the coast of New England (Shanahan et al, 2013), emissions trading (Jackson Inderberg & Bailey, 2019), and wildfire policy debates in Colorado (Crow et al., 2017).

Methods

Data for this study came from interviews with farmers in California's Central Valley. The initial list of potential participants was those featured in media reports about the agriculture coalition's response to water restrictions. Sampling was done using the snowball method. Interest in participating in this study was low during initial outreach attempts but improved over time. After about six months of reaching out, thirteen individuals were interviewed. These are influential actors within the agricultural coalition. Their opinions were quoted in the Wall Street Journal, the New York Times, the Los Angeles Times, Fox News, and on National Public Radio. Some of them gave testimony in Congress and in the state assembly. Some were members of regional agricultural trade boards.

Elite interviewing has been used in research in political science, international relations, and sociology. For research purposes, elites do not necessarily have to have a high social, economic, or political standing. However, they must have had an influential role in a situation that is being studied. As Hochschild (2009) notes, elites can help us understand how a group thinks about a situation, and they can help us make sense of, from their vantage point, the trajectory of a set of events. Within the NPF literature, too, elite interviews have been used. For example, Gray and Jones (2016) used this method to study narratives surrounding US campaign finance reforms. Two challenges with the elite interview technique, both of which were faced in this study, are the difficulty in getting elites to agree to be interviewed and small sample sizes.

Although NPF typically uses quantitative methods, the Framework itself is method-neutral. O'Bryan et al (2014) have argued that the NPF “can perform equally well in ‘qualitative analysis mode’” (p. 108). Gray and Jones (2016) have also argued the same point and further pointed out that qualitative methods can help the NPF develop further by enabling grounded theory development when the sample size is small.

The Agriculture Coalition’s Retrospective, Sensemaking Policy Narrative

Setting: Challenges to Farming in the Central Valley

California’s Central Valley is one of the most agriculturally productive regions in the nation. The Valley stretches from north of Sacramento to Kern County, just north of Los Angeles. As a participant in this study noted, agriculture in the Valley is different from anywhere else in the nation. While most agrarian regions of the country focus on one or two crops, farmers in the Valley produce over 200 crops. Most of the nation’s carrots, table grapes, almonds, pistachios, and tomatoes are grown there. In some of the counties of the Valley, about half of all employment is agriculture-related.

Data from the Public Policy Institute of California shows that 77 percent of farms are small (less than 100 acres) while only 6 percent of farms are large (over 500 acres). Even though large farms constitute only a small portion of farms in the Valley, they have nearly 60 percent of the cropped acreage (Ayres et al., 2023). The largest farms have over 100,000 acres. Kern, Tulare, and Fresno are the top three counties in the country in terms of the value of agricultural produce (Escriva-Bou et al., 2023). Crops produce about \$24 billion in annual revenue, while dairies produce another \$6 billion. Additionally, the Central Valley boasts a substantial food and beverage processing industry (Escriva-Bou et al., 2023). An average dairy farm in the Central Valley would have about 1400 cows (*What Do California Dairies Look Like?*, n.d.). Although using less than 1 percent of the nation’s farmland, the Central Valley produces a quarter of the nation’s food and 40 percent of the nation’s fruits and nuts (California Water Science Center & U.S. Geological Survey, n.d.).

Agriculture and sheep herding in California’s Central Valley were initially established by immigrants from southern Europe in the late nineteenth century. They found a Mediterranean climate and rich soil. The one thing missing, however, was water, especially on the west side of the Valley. Over time, two massive water storage and conveyance projects were constructed to supply water to the Valley, and beyond to Los Angeles. The state-run State Water Project and the federal Central Valley Project together contain an elaborate network of reservoirs, pumps, and hundreds of miles of canals. Without these projects, farming in the Valley would not be sustainable, certainly not on the present scale.

A significant challenge for farmers over the past decade has been access to water. The Valley’s water flows through the Sacramento - San Joaquin delta. This delta is an ecologically sensitive area for many reasons (Delta Stewardship Council, 2020). Water in the delta provides respite for migratory birds. Salmon and chinook populations need adequate water in the delta and at the right temperature. Tiny delta smelt fish, considered an ecological precursor species, perish quickly and in large numbers if too much water is pumped from the delta. The delta’s water is also needed to hold back the San Francisco Bay’s seawater from flowing into the Valley and destroying freshwater fish and agricultural land. Because of competing interests and limited fresh water

resources, water-versus-fish has become a significant wedge issue in the Central Valley's politics (Scoville, 2025).

Environmentalists have pursued the policy goal of restricting water flows to the Valley from the delta, arguing that water supplies to farmers hurt the delta's ecology, and that commercial agriculture on the present scale should not be occurring in the Valley anyway. They were helped in this process by "biological opinions" (Commuri, 2016) issued by state and federal agencies as well as by court orders. Environmentalists engaged in savvy venue shopping by strategically lobbying with regulatory agencies and strategically filing lawsuits. They were also more effective than farmers in presenting a coherent narrative in the media.

Court rulings issued between 2007 and 2014 imposed severe restrictions on the pumping of water from the delta in order to protect the delta smelt fish (Commuri, 2016). In this debate, the media has largely been sympathetic to the environmentalists' stories. The resulting cuts in water allocations to farmers were drastic and threatened to alter water rights established, in some cases, over a hundred years ago. The situation was further complicated by California's drought from 2011 to 2016. The Valley's farmers felt that they might have scraped through the poor rainfall, but their situation was made dire due to water cuts imposed by courts following environmental advocacy. Farmers and pro-farmer groups referred to this as a "man-made drought" (Nehring, 2016).

This confluence of drought conditions and a lack of support for their interests at the policy level posed a significant crisis for agriculture in the Valley. If these conditions continued, farming on the same scale would not be sustainable. The other important aspect of this issue is the sense of shock felt by farmers. Even though they saw changes occurring in the policy and regulatory environment, they believed that policymakers would be broadly sympathetic to their need for water. When that did not happen, they began questioning how they had ended up where they were. Why was there not more sympathy for farmers, even though they are such an important contributor to the economy?

Plot: Inadvertent victims of their own success

Jones and McBeth (2010) argue that a plot is a fundamental component in a policy narrative, as it connects the setting and characters. Plot helps us understand the causal element within the narrative. A causal story links events and expected or desired outcomes with policy actors and their motives. In fact, policy actors often manipulate causal stories to increase the likelihood that their preferred policy outcomes are achieved. Stone (1989) posits that, "political actors use narrative story lines and symbolic devices to manipulate so-called issue characteristics, all the while making it seem as though they are simply describing facts" (1989, p. 282).

Participants felt that the abundant and cheap food produced by the Central Valley's farmers has, in a way, hurt their own cause. Specifically, they felt that most Californians, who also happen to live in coastal cities, do not appreciate what it takes to bring food to the table and are unsympathetic to the needs of farmers. One said, "I estimate that that's why there are 40 million people living in California, food is abundant here and it's very inexpensive". Another said, "I honestly think that the majority of the general public ... don't understand where their food is coming from. That is the general consensus of most farmers. For example, we grow Cuties, and I would say the majority

of soccer moms think that Cuties come from McDonald's. They don't understand how much it takes to grow that, how many people it takes, and how much equipment it takes to grow that."

Another noted that farmers have taken advantage of the Central Valley's climate and soil to produce a variety of food in all seasons. This paradoxically has led consumers to take their food (and indirectly, the farmers) for granted. "There has just been a big disconnect between people and their food ... there is no more seasonality anymore. If you want tomatoes, it's there year-round. I was in Italy, and it was the time when the Zucchini flower was in season, and it was in every pasta dish. Everybody was excited because you had these fresh Zucchini and flowers everywhere. You don't have this in America anymore. There are no seasons for your food, you just go to the market and it is there all year. You don't think about the farmer who is producing it because you think it's always going to be there at this location with other choices."

Several farmers felt that Californians would realize the value of agriculture only when they face food shortages or significant price increases. Until then, they will not care about the plight of farmers. "I don't think that the general public is going to realize this until the food at the store is not cheaper anymore or not available." A participant summarized the group's thinking thus: "I think it's a big mistake on our end that we have allowed things to be so disconnected and easy that we can all stop at any store anywhere in the state, everything is there. You don't have to think about where food came from. No one makes that connection. How did it get there and where did they get there from"?

Farmers, by virtue of their success, have inadvertently created a situation where people living in California's political power centers (Los Angeles, San Francisco, and Sacramento) do not appreciate or support agriculture. This framing by the participants of this study involved purposeful action but unintended consequences (Stone, 1989). The inadvertent causal story in the agriculture coalition's retrospective narrative played a specific role in their understanding of what happened vis-à-vis the lack of policy support for providing water for farmers. This sets the stage in their narrative for some interest groups to exploit the situation and block farmers' access to water. The narrative of inadvertent negative consequences of their success does not explain to farmers everything that happened, but it explains why what happened was possible in the first place.

Characters

Villains

Participants assigned much of the blame for their policy loss to environmentalists, who were portrayed in these interviews as "large and powerful." Environmentalists were blamed for a variety of problems experienced by farmers, from water cuts to increased scrutiny of pesticide use to blocking the construction of new reservoirs. Participants also believe that environmentalists use false data to drum up opposition to farmers in California's big cities. A participant summed up this position by saying that "the coastal cities control what happens in California and the environmental groups have a lot of power and give a lot of money to political candidates." He contrasted the coordination and power exercised by environmental groups with the disunity within the agriculture coalition. "In agriculture, we are very independent people and we don't work very well together. So, you have these different farming groups and different areas- farmers in the north may feel like farmers in the south want to take their water. Farmers in the west don't like the farmers in the east,

and a lot of farmers in the delta don't like anybody. So, there's not a lot of unity in farming, which is bad."

Participants felt that environmental groups use venue shopping effectively to build pressure on the agriculture coalition. Venue shopping (Birkland, 2015) is a strategy where an interest group selects a venue (such as a geographic location, legislature, or court) where it may face favorable odds. For example, a participant said that environmental groups initially chose to target pesticide use on strawberries in Monterey and Ventura counties to get a relatively easy win. The participant argued that when environmentalists got a win, they moved to other counties and expanded the scope of the fight. Environmentalists are also believed to have "millions of dollars of PR money and an unlimited range of influence."

Environmentalists' power is portrayed as so strong that they can consistently block policy initiatives beneficial to the agriculture coalition. According to several participants, the state of California will not invest in new reservoirs because environmentalists have blocked this. The motive attributed to environmentalists is not a genuine belief to protect the environment but to justify their existence. "Otherwise, what do we need environmentalists for"?

There is thus a devil shift (Shanahan et al, 2013) about the portrayal of environmentalists. Although small in number, they are considered by farmers to be extremely powerful in determining what happens to the agricultural coalition. Their power is perceived to extend beyond controlling water to several other domains. They are also seen as controlling the state legislators- "I think a lot of it has to do with our particular state legislators who support (the environmentalists) and the amount of money that those people throw at politicians."

Complicit Victims

An unusual aspect about the narrative that emerged in this study is that the 'victims' also partly blamed themselves for the outcome of the policy contest. They blamed themselves for not doing more to communicate with others about the importance of what they do, and about the importance of water for what they do. "We are one hundred percent not good at telling our story. That's probably our biggest issue; we haven't come together as one" to communicate a message. Another said that the "reason why we are a \$300 billion industry that the public doesn't support is because we don't do a good job telling our story". Participants attributed this to the "culture" in the agriculture community where "we do our job and keep our head down." They said that farmers are inclined to "stay off the radar." One participant noted, "my father's generation would never do interviews; they would also never talk to the media." Farmers also tend to be "eternal optimists" - they would rather do their job and hope for the best than lobby for what they need. Another farmer reflected, "We do a lot of good things, but we do a lousy job of telling our story."

Others have said that, to the extent that farmers do talk about issues and complain, they do so within their ingroup only. Farmers are good at talking to each other but not to outsiders, "like an old-style, typical farmers' coffee shop." There is a realization among the participants in this study that the agricultural community needs more than just a coffee shop; they need to talk to a broader audience. One participant noted that when he does talk to "outsiders" and tells them the "whole story" regarding how farmers use water, "people say, 'I am sorry, I did not know'". There is also a growing sense that when farmers do not speak to a broader audience, outsiders will shape the

story told about agriculture and water. “We don’t do a good job telling our story. Others keep telling our story through bad news - GMOs, animal abuse, pesticides.” Participants realize that “something is not working” about the way they connect with Californians. “It is time to step up and educate people. We have to educate LA and San Diego and show them where their food comes from.”

Tragic Heroes

To the extent that there is a hero in this narrative, it is also the farmer, seen in this narrative as a tragic hero. They discussed how farmers have done an exceptional job producing food for the nation, often under trying circumstances. One farmer said that there are fewer farmers now in California than ever before, thanks to how burdensome regulations and water cuts have been on the agricultural community. Nevertheless, a farmer said, “We have doubled our yields.” Instead of receiving “praise, we are told that we are taking too much water.” Many of the participants have reinforced this theme of farmers heroically producing abundant food to cater to a growing population amidst declining water access and harsher regulations. Several farmers noted that they contribute billions to the economy and provide food security to the nation ... “yet we are ignored” by politicians in Sacramento. As a third-generation farmer remarked, “If the world had no farmers, then nothing else matters.”

Moral of the Story

The NPF identifies a “moral of the story” (Jones et al, 2014) or a policy solution as an important aspect of policy narratives. In retrospective narratives, however, the moral of the story would appear differently and serve a different purpose. Instead of being a policy solution being offered in a strategic narrative, the moral of the story is the set of lessons learned as a result of a policy outcome. These are reflections of participants regarding what they learned and what they think they should do next. It is possible that the moral of the story in a retrospective policy narrative could become the basis for a new strategic narrative in the future.

The moral of the story in this case has two themes. The first is that farmers have to impress upon the people of California that agriculture is facing a desperate, existential threat. As one farmer said, “We have to show the people what is coming (their way) if things go on like this for another 20 or 30 years”. He was referring to sustained water cuts and their impact on agriculture. He argued that Californians would not have access to plentiful and cheap food. “We have to cry wolf” occasionally. Participants have said that every week they hear of another farmer selling his or her land and moving out of state. A farmer said that he was offered well-paying jobs in Peru and is considering moving there. Another said that he would not want his children to farm and that succession is the single biggest crisis in family farms in California. Participants discussed the implications of these trends--rising food prices and threats to our food security. As one participant asked, can we imagine a world without farmers? An important lesson participants say they learned is that they need to convey this sense of crisis to the rest of the state. “If people want to live here, build homes here, have jobs, then agriculture must be given its water.”

The second theme involves winning over supporters by telling a better story about how farmers use water. A farmer noted that people in Los Angeles and San Francisco should be reminded that when they consume food, they consume water. “Water just flows through us. We use it to make food.” Participants felt that the “whole story” of water and food needs to be told more aggressively.

They especially hated sound bites that portray farmers as wasteful, such as the oft-repeated comment that ‘one gallon of water is used to produce one almond’ (Quintana, 2015). They argued that this is an incomplete picture of how every part of the almond tree is used, and almond farmers, in reality, use much less water than they are accused of using. Farmers, though, realize that they do not have alternative sound bites of their own to offer. Participants also told me that they want to improve their ability to communicate the efficiencies they are bringing to water use while still producing a large volume of the nation’s food. This sentiment is consistent with the evidence: while farm GDP in the Central Valley has doubled since the late 1960s, total farm water use has remained relatively unchanged (Peterson et al., 2023). Farmers in this study felt that these positive stories are not reaching audiences in California’s urban areas. A farmer noted, “It is as if the urban centers live in a parallel world from us”. They are realizing, however, that they need to communicate better with that “parallel world.”

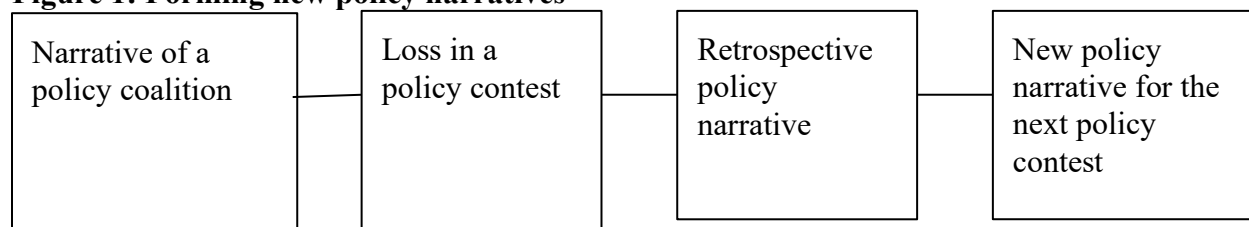
Another crucial point farmers made is an acknowledgment that all the farm groups need to speak with one voice on the water issue. The farm coalition is split between the various commodity groups and farmers in different regions. Participants in this study felt that each group had taken care of its own interests. They are now realizing that water is an issue that impacts all of them. They also realize that the environmentalists coordinate their advocacy strategies while farmers do not.

This point is an important one. The conclusion farmers seem to have drawn is that the power centers, as far as influencing water policies, are San Francisco, Los Angeles, and Sacramento. They realize that they need to influence opinions at those locations; doing their work and “staying off the radar” is not sufficient anymore. They need to expand their coalition of support. The agriculture coalition has also realized that the opposing coalition is unified, and more importantly, coordinates its advocacy. Farmers feel that they need to do the same.

Conclusion

There are several reasons why coalitions of actors deploy policy narratives. This could be to change the status quo in a policy situation (as the environmental coalition did, in this case), to bring awareness about new issues, or as a response to a threat faced by a coalition’s access to important policy allocations. In the water issue in California’s Central Valley, the environmental coalition took the lead in establishing a strong narrative (Commuri, 2016). The agricultural coalition responded, but with a defensive narrative. Once a significant policy outcome has occurred (water cuts to farmers, for example), the losing coalition has an incentive to undertake a retrospective sensemaking exercise. This retrospective sensemaking could then lead to the creation of a new strategic narrative that incorporates some of the lessons learned from previous policy contests. In that sense, retrospective and strategic narratives are connected. This needs to be explored through case studies in future research.

Figure 1: Forming new policy narratives



The retrospective reflections of participants in this study also offered thoughts on what should happen to be successful. Drawing on these comments, the following are two significant implications for the agriculture coalition while it develops a response narrative to the past policy failure.

Expand the coalition of support: It does not help that the victims and heroes are the same group in the retrospective narrative of the agriculture coalition. To be effective, farmers have to bring in other actors and entities who are potential victims of policy fights over water, and to communicate this effectively. To gain leverage in highly contested policy situations, a larger coalition of people supporting agriculture will benefit that group. The agriculture coalition has been doing this better in recent years, like with their ‘My Job Depends on Ag’ campaign. This campaign includes news stories, TV shows, merchandise, and other outreach efforts. The campaign aims to demonstrate the intricate relationship between agriculture and everyone’s lives in California. A larger, more inclusive policy narrative is essential for the agriculture coalition to garner policy successes.

Tell your story where it matters: Many participants noted that a reason for the environmental coalition’s success is that their arguments had traction in politically powerful areas like Los Angeles, San Francisco, and Sacramento. Farmers were not as effective in communicating outside the areas where they operate. Finding and using narrative elements that resonate broadly across the state is important because major policy fights are resolved outside the agricultural areas. In conclusion, while previous NPF research has mainly focused on strategic policy narratives, this study found that the NPF is also a helpful tool for studying retrospective narratives. Using this approach, and by studying how a losing policy coalition thinks about their policy loss, stakeholders can learn lessons on developing compelling and politically effective policy narratives.

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